





**IS 3.5** 

**IS 4.0** 

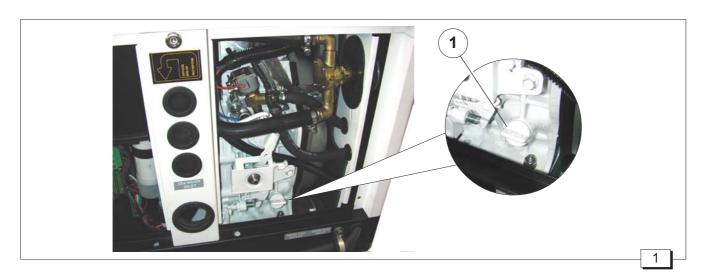
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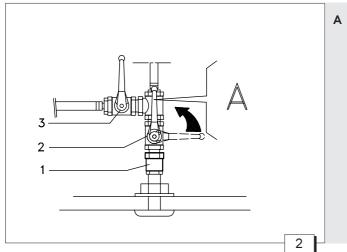
**IS 6.0** 

MANUALE USO E MANUTENZIONE
USE AND MAINTENANCE MANUAL
MANUEL D'INSTRUCTIONS ET D'ENTRETIEN
GEBRAUCHSANWEISUNG UND WARTUNGSVORSCHRIFTEN
MANUAL USO Y MANTENIMENTO
INSTALLATIEHANDLEIDING

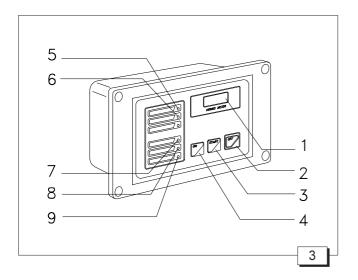


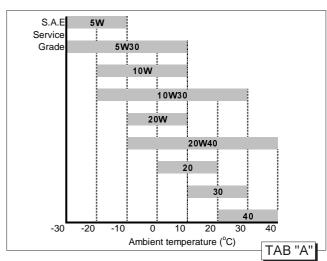




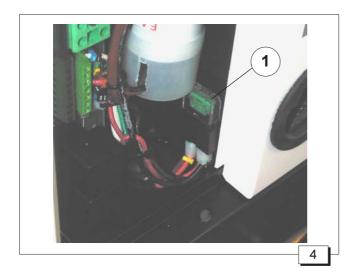


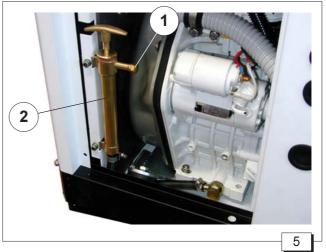
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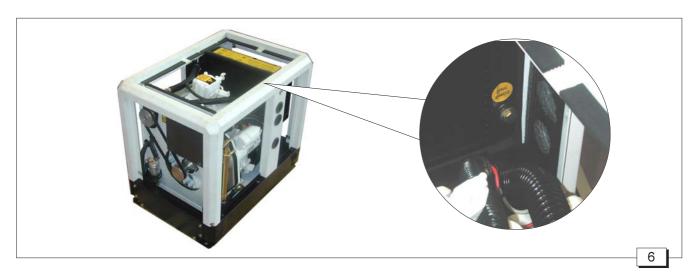


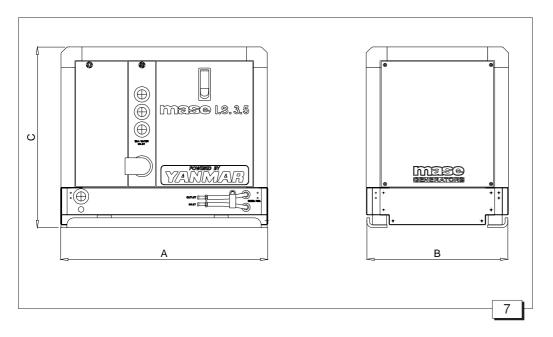






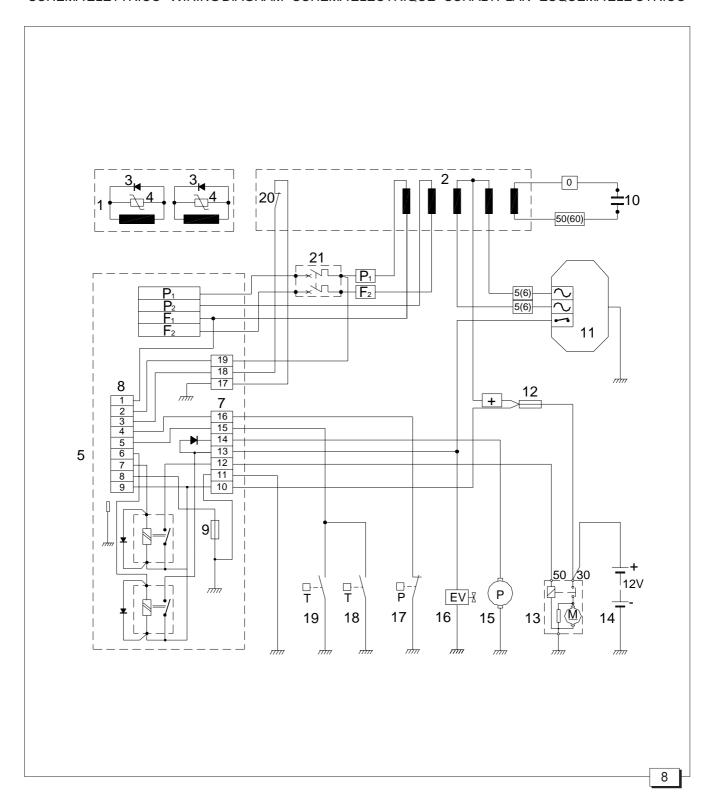








# SCHEMA ELETTRICO-WIRING DIAGRAM-SCHEMA ELECTRIQUE-SCHALTPLAN-ESQUEMA ELE'CTRICO







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deat	DANGER A statement advising of the h of personnel or in hazard to health.	need to take care lest there be serious consequences resulting in
[ <u>/</u> pote	<b>WARNING</b> A situation that could occur ntial for human injury, damage to property, dan	during the lifetime of a product, system or plant that has the nage to the environment, or economic loss.
mate	CAUTION A statement advising of the erial items such as the asset or the product.	need to take care lest serious consequences result in harm to
Drav	NFORMATION Important information.  ving are provided by way of example. Should you all, the safety regulations and relevant informations.	our machine be quite different from the illustrations contained in this ition are always granted.

The manufacturer's policy of constant development and updating may lead to modifications without prior notice.





# CONGRATULATIONS ON HAVING CHOSEN A MASE PRODUCT

This manual contains all the necessary information for proper installation and use of the generator. It's essential, either for the customer's safety and satisfaction or for good reliability of the generator, to carry out proper installation and a careful pre-delivery test.

A wrong installation or an oversight on testing may compromise the efficiency of the generator and even jeopardize the customer's safety.

All information and illustrations in this handbook refer to the latest produced model at the time of printing.

For any further information, please get in touch with the nearest MASE SERVICE CENTER, they'll be pleased to help you at any time.

MASE reserve the right to introduce changes without prior notice. No part or illustration contained in this handbook can be reproduced without previous approval by MASE

# MASE GENERATORS S.p.A.

#### **1SAFETY REGULATIONS**

- Read carefully all the instructions given in this handbook and in the installation manual; they are of the utmost importance for correct installation and use of the unit and for prompt intervention in case of need.
- Do not allow unskilled or untrained people to use the unit.
- Do not allow children or animals to get close to the generator while it is working.
- Do not handle the generator or the remote control panel with wet hands; any misuse may cause electric shocks.
- Any testing of the unit is to be carried out only when the engine is stopped. Possible checks on the generator when it's running have to be performed only by skilled workers.

### 2 PRELIMINARY CHECKS

On starting the generator for the first time and after any servicing, it is advisable to make sure that:

- The oil is at the right level through the rod ref. 1 Fig. 1, as per table for suggested oils.
- The generator is well secured to the soundproofing box by means of the proper bolts.
- The electric loads are disconnected so as to avoid starting the generator on load.
- Every connection (fuel, exhaust, remote control, A.C., battery) has been properly carried out and there are no connections in bad conditions.
- The water cock is open, as per (ref. 2 fig. 2)
- If anon-return valve is used, the cooling circuit from the valve up to the pump has been manually filled (ref. 1 fig. 2)

## 3 GENERATOR USE

Before starting the generator, make sure all preliminary checks, as per item 1, have been properly carried out

# **Starting**

To start the engine push the button << ON >> (fig. 3 ref. 4), all the pilot and warning lamps will glow for 5 sec. about in a self control function, later on only the << panel on >> (fig. 3 ref. 5) and then start the engine pushing the button << Start >> (fig. 3 ref. 3), for 5 sec. max. Release it only when the engine runs. A correct generator functioning is demostrated by the led (fig. 3 ref. 6) glowing on. Once started, the safety devices of the generator are automaticily activated (see item. 4).

#### **Generator Stop**

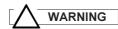
The generator can be stopped ushing the <<OFF>> button on the control panel (fig. 3 ref 2).

#### **4SAFETY DEVICES**

The generator has been equipped with a setof safety devices in case of any misuse or running trouble, as follows:

# - Low oil-pressure device:

it causes the generator shut-down in case of insufficient oil pressure. Its intervention is shown by the warning light going on (fig. 3 Ref. 7). It is usually enough to top up the oil before starting the generator again.



The low oil-pressure device does not necessarily show the oil level; a check of the oil level is consequently necessary at regular intervals.

# - High temperature device:

it causes generator shut-down in case of high temperature of the engine. Its intervention is shown by the warning light going on (fig.3 ref.8). Should this device come in to operation, look for and eliminate the causes of the intervention and then start the generator again.

# - Alternator overload/over temperature device:

it comes into operation, stopping the generator, in case of thermic or electric overload of the alternator. Its intervention is shown by the relative warning light going on (fig. 3 ref. 9). Wait until the temperature of the alternator windings goes back to the normal values. It's however recommended to look for and eliminate the causes of the intervention before starting the generator again.



If one of the above safety devices intervenes, look for and eliminate the causes of the intervention, then push the << STOP >> button to avoid that signal keeps stored.







In case of the fuse (ref.1 Fig.4) got burnt, a protectio inserts and does not allows the generator to start.

#### **5 MAINTENANCE**



# CAUTION

Any servicing is to be carried out with the engine stopped after it has cooled enough, and only by skilled and licensed staff.

# **Engine maintenance**

The engine has to be serviced at regular intervals, as shown in the table:

for any further and more detailed information, please consult the handbook supplied by the engine manufacturer, accompanying every generator.

# INFORMATION

Cheek oil level by means of the proper dipstick (fig. 5 ref. 1) and make sure it is always between the minimum and maximum levels of the dipstick.

Engine carter capacity:

IS 3.5 - 4.0 It.1.1 IS 5.0 - 6.0 It 1.65

Oil topping up and replacement can be carried out through the hole. (fig. 1 ref. 1).

For changing oil, remove the levelstick and replace oil with the special pipe.

We suggest to carry out the draining when the oil is still warm enough, to allow an easy flowing out.

# 6 INACTIVE PERIOD

Should the unit remain unused for a long time, it's necessary to act as follows:

- Replace sump oil.
- Replace oil filter.
- Replace fuel filter.
- Replace the zinc anodes (ref. 1 fig. 6)
- If the room temperature is near or below  $0^{\circ}$ C it is indispensable to drain the engine cooling circuit using the lever cock (ref. 3 fig. 2)
- Lubrificate the water pump impeller.

# 7 CONTROL PANEL (fig. 3)

- 1)HOURSMETER
- 2) OFF BUTTON
- 3) START BUTTON
- 4) BUTTON ON
- 5) PANEL ON LED (GREEN)
- 6) GENERATOR OUTPUT LED (GREEN)
- 7) OIL PRESSURE LED (RED)
- 8) ENGINE TEMPERATURE LED (RED)
- 9) GENERATOR TEMPERATURE LED (RED)

When the unit stops because a circuit breaker trips, the operating time indication disappears from the control panel display and a code appears to indicate the cause of the generator stop.

In the table below all the codes and their meaning are listed

	ALARM CODES				
CODE CAUSE OF CIRCUIT-BREAKER TRIP					
E - 80	No power on generator				
E - 81	Low oil pressure				
E - 82	High motor temperature				
E - 83	High alternator temperature				
E - 85	Generator overload				
E - 87	At 30" from start unit does not reach 80% of nominal voltage				
batt	Low battery				

**Code E - 80** This code indicates that the unit has stopped because of no voltage = 0 Volt. When this code appears, it means:

- that the control panel is unable to measure the alternator voltage for cut-off of an electrical connection;
- that the alternator is damaged.

**Code E - 81** This code indicates that the unit has stopped because the motor lubrication system pressure is insufficient.

**Code E - 82** This code indicates that the unit has stopped because the motor has reached too high temperatures.

**Code E - 83** This code indicates that the unit has stopped because the alternator has reached too high temperatures.

**Code E - 85** This code indicates that the unit has stopped because the voltage has dropped to below 70% of the nominal value for longer than 15 seconds.



**Code E - 87** This code indicates that the unit has stopped because the generator voltage has not reached 80% of the nominal value 30 seconds after starting. This could be caused by insufficient motor RPM or a broken alternator.

**batt** This code indicates that the battery is low. When this code appears, the generator is not stopped.



When a circuit breaker has tripped with a consequent generator stop, the panel must be reset by pressing the "OFF" button in order to restart the unit.

# INFORMATION

If the unit is started and the alternator does not produce voltage, or the control panel does not read voltage, the latter switches off completely after one minute, stopping the unit.

# 8 PROTECTION FUSE (fig. 4)

- 1) RELAY CIRCUIT FUSE
- 2) BATTERY CHARGER FUSE
- 3)THERMALSWITCH

### 9 DIMENSIONS AND WEIGHT (fig. 7)

	IS 3.5 - 4.0	IS 5.0 - 6.0
a) Lengh (mm-inch)	590-23	675-26.6
<b>b)</b> Width (mm-inch)	406-15.9	468-18.4
c) Height (mm-inch)	515-20.2	565-22.2
Weight (kg-lb)	96-213	130-289

# 10 DESCRIPTION WIRING DIAGRAM (fig. 8)

- 1 ROTOR
- 2 STATOR
- 3 DIODE 3A
- 4 VARISTOR
- 5 PRINTED CIRCUIT RELAY
- 6 POWER TERMINAL BOARD
- 7 RELAY CIRCUIT TERMINAL BOARD
- 8 CONTROL PANEL TERMINAL BOARD
- 9 FUSE 1A
- **10** CAPACITOR
- 11 BATTERY CHARGER REGULATOR
- 12 FUSE
- 13 STARTER
- 14 BATTERY
- **15** FUEL PUMP
- 16 FUEL SOLENOID17 OIL PRESSURE SWITCH
- 18 OVERHEAD ENGINE THERMOSTAT
- **19** WATER TERMOSTAT
- **20** ALTERNATOR THERMOSTAT
- 21 THERMALSWITCH

#### 11 TROUBLE MAINTENANCE

MAIN	AINTENANCE				HOURS							
MAIN	ENANCE	10	20	50	100	200	300	500	1000			
CLEANNING	INJECTORS							•				
	INTERNAL OIL FILTER							•				
	GENERATOR CLEANING						•					
	KRANKCASE OIL LEVEL	•										
	BATTERY WATER LEVEL			•								
CHECK												
	ROCKER AARMS CLEARANCE		*					•				
	TIGHTEN FUEL DELIVERY UNION						•					
ĮN.	CRANKCASE OIL		*			•						
REPLACEMENT	OIL FILTER							•				
REPL	FUEL FILTER						•					
OVERHAUL	LAP.VALVES								•			
OVER	REPLACEMENT OF PISTON'S ELASTIC BANDAGES								•			

\* FIRST REPLACEMENT

#### 12 TROUBLE SHOOTING

COMPLAINT				ΧE	X
PROBABLE REASON	DOES NOT START	START AND STOP	UNSTABLE RUNNING	WHITE SMOCKE	BLACK SMOCKE
Defective starting buttons	•				
Defective fuel solenoid	•	•			
Defective battery Battery cable section	•				
Defective starting motor	•				
Piping fuel filter choked	•	•			
12V circuit fuse	•				
Avv./Ev.relay	•				
Too much oil in crankcase			•	•	
Safety device intervention	•	•			
Overload					•
Defective governor linkage			•		
Worm valve guides				•	
Blocked valves	•				
Worm cylinder and position rings				•	
Defective injector	•				•
Defective injector pump	•	•	•		•
Defective feeding pump	•	•			





# 13 TECHNICAL FEATURES

FNOINE	IS 3.	5- 4.0	IS 5.0	0- 6.0	
ENGINE	YAN	MAR	YANMAR		
Model	L70	)AE	L10	0AE	
1cylinder,4 stroke,internal combustion air-cooled diesel					
Displacement	296	3cc	406	3cc	
R.P.M.	3000	3600	3000	3600	
Bore for stroke	78 X	62	86 X	70	
PowerHp	5,5/6,1	6,0/6,7	7,7/8,8	9/10	
Fuel consumption g./Hp.h	220	230	220	230	
Fuel	DIES	EL	DIESEL		
Starting system	ELECT	RIC	ELECTRIC		
Oil capacity	1,1	1 It.	1,65 lt.		
Max inclination	20	0	20°		
ALTERNATOR					
Synchronous,self-excited,single phase, 2 poles, brushless					
Continuous output	2700W	2900W	4000W	4800W	
Powerfactor		1	1		
Insulation class	F	<u> </u>	F		
Frequecy Hz	6	)	60		





**IS 3.5** 

**IS 4.0** 

**IS 5.0** 

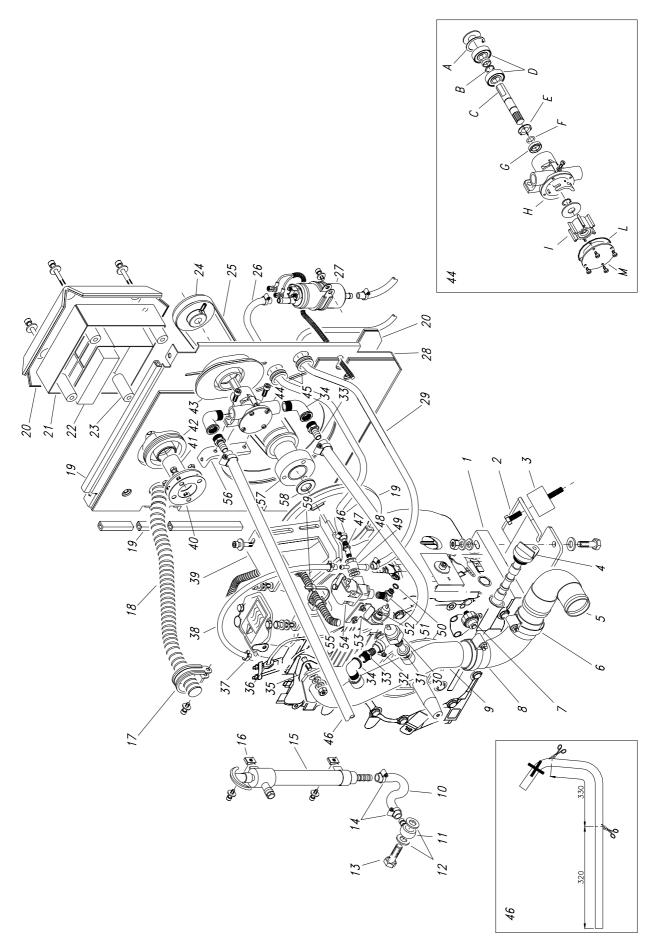
**IS 6.0** 

# RICAMBI SPARE PARTS



motore engine

FIG. 1 / 4





motore engine

FIG. 1 / 4

Rif.	Cod.	Qty.	Descrizione	Description
1	04955		Motore Yanmar L.70 AE IS 3.5 50Hz	YANMAR L.70 AE engine IS 3.5 50Hz
1	011775	1	Motore Yanmar L.70 AE EPA IS 4.0 60Hz	YANMAR L.70 AE EPA engine IS 4.0 60Hz
2	62497	1	Staffa supporto motore	Support bracket engine
3	70128	2	Antivibrante D40x30 40sh M8 "b"	Shock absorber D40x30 40sh M8 "b"
4	97536	1	Filtro olio motore	Engine oil filter
5	10822	1	Curva scarico D.40/D.45	Exhaust elbow
6	10794	2	Fascetta D. 40/60 H13	Clamp
7	97537	1	Pressostato olio	Oil pressure switch
8	71113	1	Manicotto D.37 3475-8585103	Sleeve
9	013122	1	Miscelatore	Mixer
10	70969	26cm	Tubo Radiatore Di. 28	Pipe
11	11048	1	Raccordo ad occhio D.16 con portagomma D.10	Union
12	A10414	2	Rondella D.16 rame	Copper washer
13	11071	1	Vite forata M16x 1,5 L.31	Hollow screw
14	10791	6	Fascetta D. 8/16 H 9	Clamp
15	20250	1	Pompa ricambio olio 3/4"	Oil drainage pump
16	10987	4	Attacco rapid NUT 955	Union
17	11281		Fascetta D. 30 gommata	Rubberized clamp
18	70961	40cm	Guaina AIRFLEX DM.28x34 L.400	Air pipe
19	71237	200cm	Guarnizione adesiva KRONSTIK D 12x10	Adhesive gasket
20	71226	1	Kit fonoassorbente	Soundproofing kit
21	013133	1	Filtro aria motore	Engine air filter
22	013432	1	Elemento filtrante	Filtering element
23	11384	4	Colonna D.18x7 H44	Spacer
24	50257		Puleggia Z60 foro 12 H26 IS 3.5 50Hz	Pulley IS 3.5 50Hz
24	50260		Puleggia Z70 foro 12 H 26 IS 4.0 60Hz	Pulley IS 4.0 60Hz
25	70196	1	Cinghia Z23-10x585 mec-v-belt IS 3.5 50Hz	V-belt IS 3.5 50Hz
25	71008	1	Cinghia Z24-10X610 mec-v-belt <b>IS 4.0</b> 60Hz	V-belt <b>IS 4.0</b> 60Hz
26	71169	27cm	Tubo carburante A1 D.8 ISO7840	Fuel pipe
27	31004	1	Pompa Pierburg 7.21440.03	Pierburg pump
28	013066		Paratia motore	Bulkhead
29			Tubo carburante A1 D.8 ISO7840	Fuel pipe
30	30253		Termocontatto VDO 70° rif.867	Exhaust thermostat
31	10342		Rondella D.14 rame	Washer
32	10825		Fascetta D. 16/25 H9	Clamp
33	10614		Portagomma D.15 3/8"	Nipple
34	10814		Gomito a 90° M/F3/8"	Elbow
35	97601		Guarnizione scarico	Exhaust gasket
36	97666		Iniettore Yanmar L.70 AE	Fuel Injector
37	10770		Fascetta clic D. 9,5	Clamp
38			Tubo D.4x9	Pipe
39	61912	1	Staffa supp.pompa acqua	Water pump support bracket



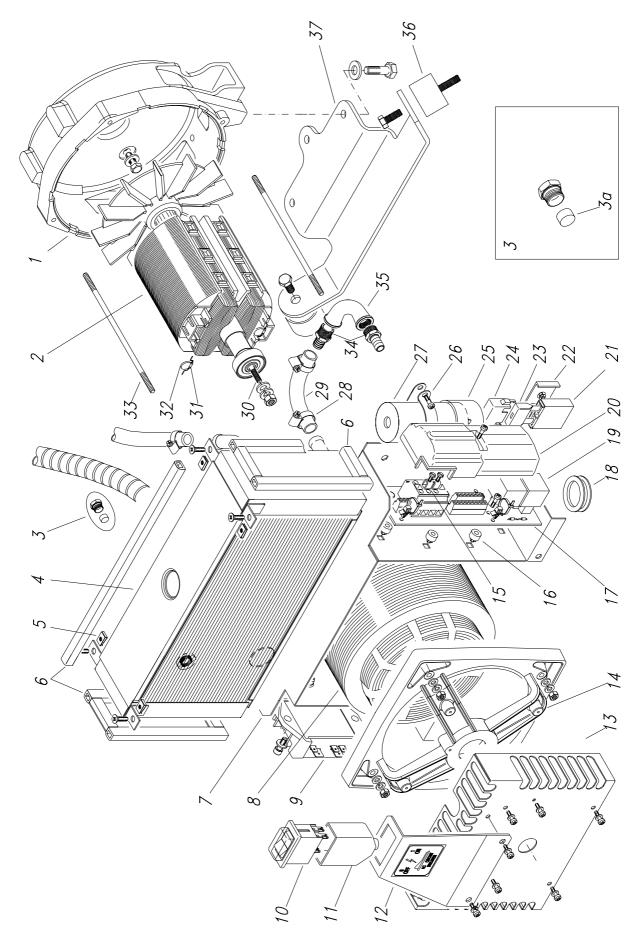
FIG. 1/4

Rif.	Cod.	Qty.	Descrizione	Description
40	97535		Guarnizione aspirazione	Air intake gasket
41	62539	1	Collettore aspirazione	Air intake manifold
42	70802	1	Cuffia filtro aria	Manifold rubber cover
43	70808	1	Cuffia pompa acqua	Pump rubber cover
44	31001	1	Pompa Johnson F35B-8	Johnson pump F35B-8
45	70647	2	Passacavo Di 16	Grommet
46	71092	1	Manicotto D.15 gomma art.5050 (tagliato)	Cutted sleeve
47	10812	1	Portagomma forato D.8 M10	Hollow nipple
48	10303	2	Rondella D.10	Washer
49	10813	1	Occhio orientabile D.8/D.5	Nipple
50	97538	1	Anello O-Ring	O-Ring
51	97502	1	Introduttore mot. Yanmar L70	Union
52	80120	1	Sonda alta temperura testa	Exhaust thermostat
53	07166	1	Staffa elettrovalvola	Electrovalve bracket
54	30647	1	Elettrovalvola 2832B5-0	Fuel electrovalve
55	10537	2	Supporto SAREL 995	Support
56	61163	1	Piastra pompa acqua	Water pump plate
57	50266	1	Puleggia Z50 mozzo 32 H66	Engine pulley
58	10997	1	Rondella volano motore	Engine side washer
59	013450	1	Cablaggio motore	Engine harness
^	00700	4	A H 1 4	On an aire a
A B	92738	1	Anello elastico	Snap ring
	92603		Anello elastico	Snap ring
С	92734	1	Albero	Pump shaft
D	92604	2	Cuscinetto	Bearing
E	92737	1	Distanziale	Spacer
F	92602	1	Anello OR	O-Ring
G	92605	1	Paraolio	Oil seal
H	92735	1	Corpo pompa	Pump web
$\perp$	80161	1	Girante	Impeller
L	93312	1	Guarnizione	Gasket
M	92736	1	Coperchietto	Pump cover



alternatore alternator

FIG. 2/4





alternatore alternator

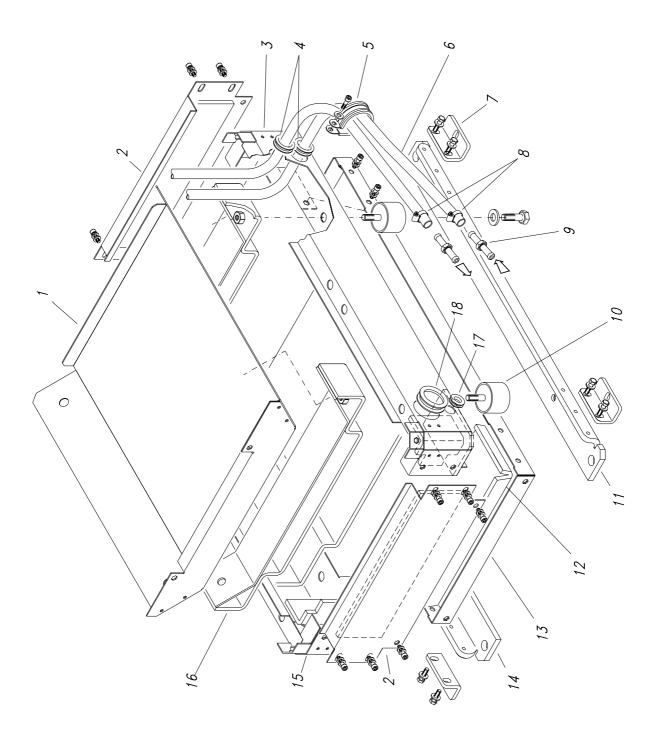
FIG. 2/4

5 il.	CRG.	4 ty.	<b>DesFriziRne</b>	DesFriStiRn
1	013048	1	Coperchio lato motore	Engine side cover
2	013045	1	Rotore 123/080	Rotor
3	80162	1	Zinco completo di tappo	Zinc anode with plug
3a	92837	1	Zinco	Zinc anode
4	62510	1	Scambiatore acqua/aria	Water/air exchanger
5	10987	4	Attacco rapido NUT 955	Union
6	71237	100cm	Guarnizione adesiva KRONSTIK 12x10	Adhesive gasket
7	013135	1	Ponte supporto scambiatore	Exchanger support
8	013044	1	Statore 50Hz 115/230 IS 3.5	Stator 50Hz 230/115
8	013537	1	Statore 60Hz 120/240 <b>IS4.0</b>	Stator 60Hz 240/120
9	80542	1	Regolatore caricabatteria 4126	Battery-charger regolator
10	32715	1	Interruttore termico 2P 14A 50/60 Hz	Thermal switch
11	71228	1	Cappuccio ETA 3120 2P	Thermal switch cover
12	012485	1	Staffa supporto termico	Thermal support bracket
13	013145	1	Griglia aspirazione alternatore	Alternator grid
14	012806	1	Coperchio lato cuscinetto	Bearing side cover
15	30911	1	Ponte fisso FB10-10 PHOENIX	Bridge
16	10844	4	Colonnetta nylon D.12,5x7	Spacer
17	32690	1	Scheda rele' con termico	Relay board with thermal switch
18	10566	1	Passacavo DG. 29	Grommet
19	31678	2	Rele' 12V 30A BOSCH	Relay
20	70876	1	Protezione scheda rele'	Relay board cover
21	30925	1	Portafusibile lamellare 100351	Fuse holder
22	30926	1	Piastra portafusibile100352	Fuse holder plate
23	30921	1	Fusibile 30A lamellare 600498	Fuse 30A
24	31973	1	Coperchio per portafusibile lamellare	Fuse holder cover
25	31972	1	Coperchio per condensatore D.45	Capacitor cover
26	70318	1	Fascetta plastica CU 50	Plastic clamp
27	20206	1	Condensatore CA 20 µF 500V 4F 50/60 Hz	Capacitor 20 µF
28	10825	2	Fascetta D. 16/25 H9	Clamp
29	71168	1	Manicotto D.16/90° art3202	Sleeve
30	11382	1	Tirante centrale M8x133x5/16 C.72	Central rod
31	910589	2	Diodo	Diode
32	20521	2	Varistore	Varistor
33	11030	4	Tirante M6x125	Rod
34	10614	2	Portagomma D.15 3/8"	Nipple
35	11383	1	Gomito a 90° F-F 3/8"	Elbow
36	70128	2	Antivibrante D40x30 40sh M8 "B"	Shock absorber
37	62498	1	Staffa supporto alternatore	Alternator support bracket



basamento cassa botton frame

FIG. 3/4





basamento cassa botton frame

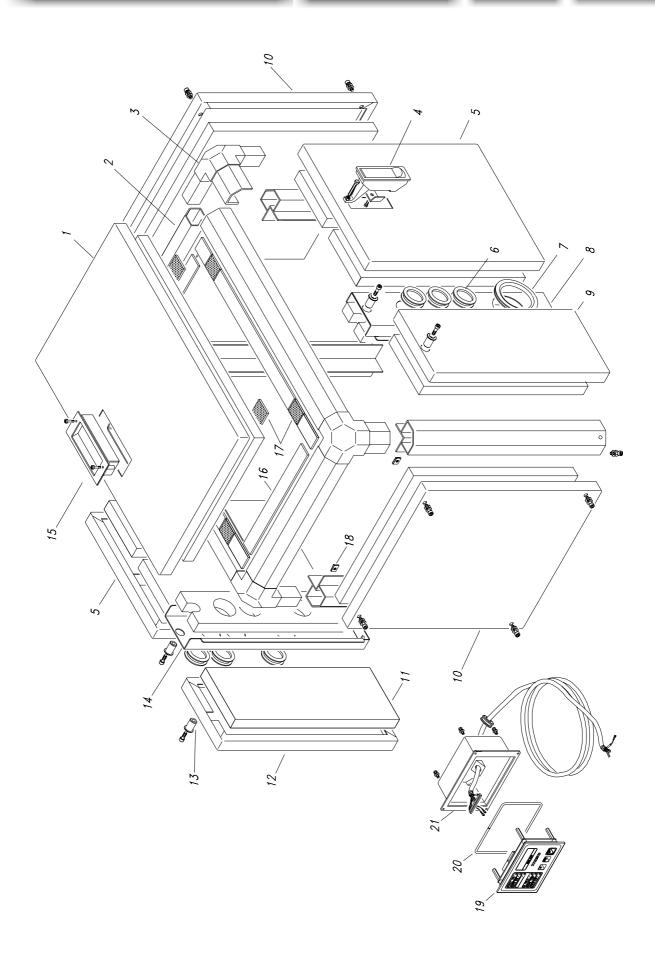
FIG. 3/4

Rif.	Cod.	Qty.	Descrizione	Description
1	013064	1	Convogliatore aria	Air manifold
2	013062	2	Pannello chiusura fondo (nudo)	Back panel (naked)
3	013394	1	Basamento dx (nudo)	Right base (naked)
4	70647	2	Passacavo DM.16 Interno	Grommet
5	11281	1	Fascetta D. 30 gommata	Rubber clamp
6	71169	150cm	Tubo carburante A1 D.8 ISO7840	Fuel pipe
7	62516	4	Staffa esterna fissaggio generatore	External fixing bracket
8	10791	2	Fascetta D. 8/16 H 9 IN	Clamp
9	11374	2	Portagomma nafta	Nipple
10	71235	4	Antivibrante D40x30 55sh M8 "C"	Shock absorber
11	62500	1	Staffa sx doppio antivibrante	Left double shock absorber bracket
12	71227	1	Kit insonorizzante fondo	Back soundproofing kit
13	013396	1	Basamento centrale (nudo)	Box bottom (naked)
14	62499	1	Staffa dx doppio antivibrante	Right double shock absorber bracket
15	013392	1	Basamento sx (nudo)	Left base (naked)
16	62501	2	Staffa supporto motore / alternatore	Engine / alternator support bracket
17	10566	1	Passacavo DG. 29	Grommet
18	70908	2	Passacavo D.120/200/40	Grommet



cassa frame

FIG. 4/4





cassa frame

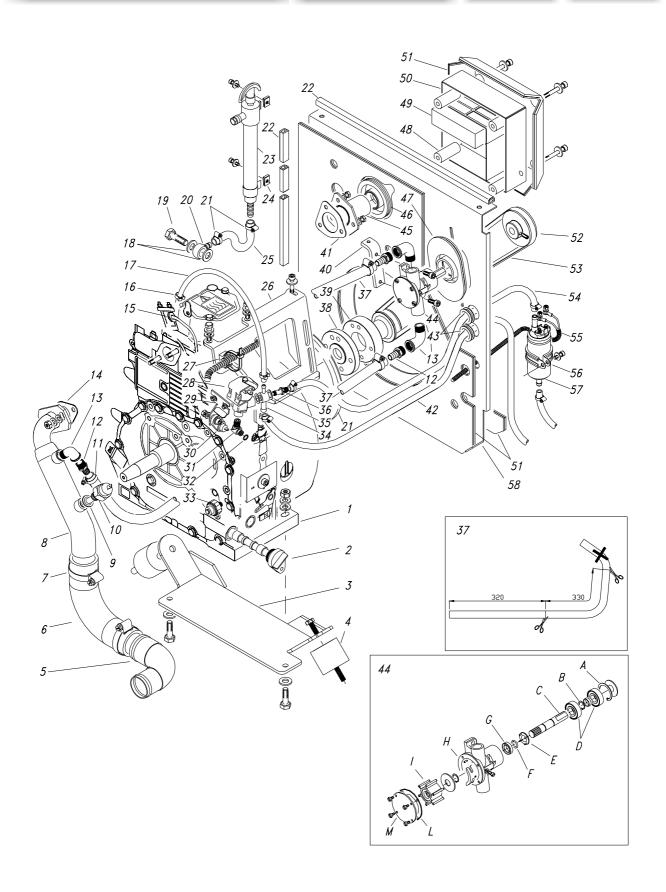
FIG. 4/4

Rif.	Cod.	Qty.	Descrizione	Description
1	013058	1	Sportello superiore (nudo)	Upper door (naked)
2	013052	1	Kit profilati	Draw pieces kit
3	011067	4	Angolo 3 vie	Corner
4	62334	2	Chiusura regolabile	Adjusting closure
5	013127	2	Sportello lato motore (nudo)	Engine side door (naked)
6	10566	6	Passacavo DG 29	Core hitch
7	10567	1	Passacavo DG. 48	Core hitch
8	013129	1	Montante centrale dx (nudo)	Right panel (naked)
9	013125	1	Sportello dx lato alternatore (nudo)	Alternator side right door (naked)
10	013056	2	Pannello fisso motore / alternatore (nudo)	Front / rear panel (naked)
11	71226	1	Kit fonoassorbente	Soundproofing kit
12	013330	1	Sportello sx lato alternatore (nudo)	Alternator side left door (naked)
13	11333	4	Bussola	Collar
14	013131	1	Montante centrale sx (nudo)	Left panel (naked)
15	71078	1	Maniglia pocket pull	Handle
16	71139	100cm	Guarnizione adesiva 20x5	Adhesive gasket
17	71182	16cm	Chiusura a strappo	Tug closing
18	10823	12	Attacco rapido M6 nut 986	Union
19	91034	1	Pannello di controllo a distanza	Remote control panel
20	70786	40cm	Guarnizione D.3 AERSTOP	Gasket
21	012195	1	Scatola + guarnizione + 10mt di cavo cablato	Remote control panel box + gasket + 10 mt cable



motore engine

FIG. 1/4



Rev. / Rel.



IS 5.0 - S.0 FIG. 1 / 4

Rif.	Cod.	Qty.	Descrizione	Description
1	06488	1	Motore Yanmar L.100 AE DEG MA IS 5 50Hz	Yanmar L.100 AE engine IS 5 50Hz
1	011776	1	Motore Yanmar L.100 AE DEG EPA IS 6.0 60Hz	Yanmar L.100 AE EPA engine IS 6.0 60Hz
2	97536	1	Filtro olio motore	Engine oil filter
3	62523	1	Staffa supporto motore	Support bracket engine
4	70650	2	Antivibrante D50x45 55Sh M10 -c-	Shock absorber D40x30 40sh M8 "b"
5	10822	1	Curva scarico D.40/D.45	Exhaust elbow
6	71242	1	Manicotto Di.38 90° EPDM	Sleeve
7	10794	2	Fascetta D. 40/ 60 H13	Clamp
8	013122	1	Miscelatore	Mixer
9	10342	1	Rondella D.14 rame	Copper washer
10	30253	1	Termocontatto VDO 70° rif.867	Exhaust thermostat
11	10825		Fascetta D. 16/25 H9	Clamp
12	10614	3	Portagomma D.15 3/8"	Nipple
13	10814	3	Gomito a 90° M/F3/8"	Elbow
14	92566	1	Guarnizione scarico	Exhaust gasket
15	97666	1	Iniettore Yanmar	Fuel Injector
16	10770	2	Fascetta clic D. 9,5	Clamp
17	70543	34cm	Tubo D.4x9	Pipe
18	A10414	2	Rondella D.16 rame	Copper washer
19	11071	1	Vite forata M16x 1,5 L.31	Hollow screw
20	11048	1	Raccordo ad occhio D.16 con portagomma D.10	Union
21	10791		Fascetta D. 8/16 H 9	Clamp
22		200cm	Guarnizione adesiva KRONSTIK D 12x10	Adhesive gasket
23	20250	1	Pompa ricambio olio 3/4"	Oil drainage pump
24	10987		Attacco rapid NUT 955	Union
25		26cm	Tubo Radiatore Di. 28	Pipe
26	62058	1	Staffa supporto pompa acqua	Water pump support bracket
27	10537	2	Supporto SAREL 995	Support
28	30647	1	Elettrovalvola 2832B5-0	Fuel electrovalve
29	07166	1	Staffa elettrovalvola	Electrovalve bracket
30	80120	1	Sonda alta temperura testa	Exhaust thermostat
31	97502	1	Introduttore motore Yanmar	Union
32	97537	1	Pressostato olio	Oil pressure switch
33	97538		Anello O-Ring	O-Ring
34	10813	1	Occhio orientabile D.8/D.5	Nipple
35	10303	2	Rondella D.10	Washer
36	10812	1	Portagomma forato D.8 M10	Hollow nipple
37	71092		Manicotto D.15 gomma art.5050 (tagliato)	Cutted sleeve
38	11032		Adattatore puleggia motore	Pulley adaptor
39	50268	1	Puleggia Z50 L.74	Engine pulley



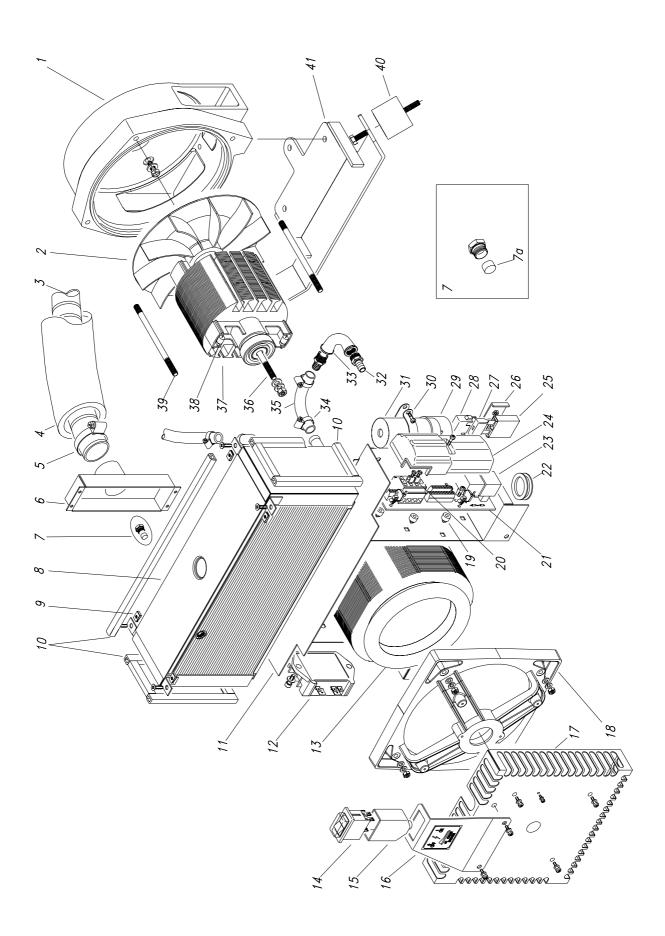
IS 5.0 - S.0 FIG. 1 / 4 Rev. / Rel.

Rif.	Cod.	Qty.	Descrizione	Description
40	01584-0	1	Piastra pompa acqua	Water pump plate
41	98945		Guarnizione aspirazione	Air intake gasket
42		80cm	Tubo carburante a1 D.8 ISO7840	Fuel pipe
43	10566	2	Passacavo DG. 29	Grommet
44	31001	1	Pompa Johnson F35B-8	Johnson pump F35B-8
45	013183	1	Collettore aspirazione	Air intake manifold
46	70802	1	Cuffia filtro aria	Manifold rubber cover
47	70808	1	Cuffia pompa acqua	Pump rubber cover
48	11384	4	Colonna D.18x7 H44	Spacer
49	013432	1	Elemento filtrante	Filtering element
50	013133	1	Filtro aria motore	Engine air filter
51	71231	1	Kit fonoassorbente	Soundproofing kit
52	50257	1	Puleggia Z60 foro 12 H26 IS 3.5 - IS 5 50Hz	Pulley IS 3.5 - IS 5 50Hz
52	50260	1	Puleggia Z70 foro 12 H 26 IS 4.0 - IS 6.0 60Hz	Pulley IS 4.0 - IS 6.0 60Hz
53	71008	1	Cinghia Z24-10x610 mec-v-belt IS 5 50Hz	V-belt IS 5 50Hz
53	71010		Cinghia Z25-10X635 mec-v-belt <b>IS 6.0</b> 60Hz	V-belt IS 6.0 60Hz
54	71169	40cm	Tubo carburante A1 D.8 ISO7840	Fuel pipe
55	013450	1	Cablaggio motore	Engine harness
56	11281	1	Fascetta D. 30 gommata	Rubberized clamp
57	31004	1	Pompa Pierburg 7.21440.03	Pierburg pump
58	013203	1	Paratia motore	Bulkhead
Α	92738	1	Anello elastico	Snap ring
В	92603	1	Anello elastico	Snap ring
С	92734	1	Albero	Pump shaft
D	92604	2	Cuscinetto	Bearing
Е	92737	1	Distanziale	Spacer
F	92602	1	Anello OR	O-Ring
G	92605		Paraolio	Oil seal
Н	92735	1	Corpo pompa	Pump web
I	80161	1	Girante	Impeller
L	93312	1	Guarnizione	Gasket
М	92736	1	Coperchietto	Pump cover



alternatore alternator

FIG. 2/4





alternatore alternator

FIG. 2/4

5 il.	CRG.	4 ty.	DesFriziRne DesFriziRne	DesFriStiRn
1	013123	1	Coperchio lato motore	Engine side cover
2	32718	1	Rotore 139/100	Rotor
3	70961	40cm	Tubo AIRFLEX K DM.28x34	Air intake pipe
4	71247	38cm	Tubo isolante mm13 D.48	Insulating pipe
5	10793	1	Fascetta	Clamp
6	013947	1	Convogliatore aspirazione filtro	Air filter intake conveyor
7	80162	1	Zinco completo di tappo	Zinc anode with plug
7a	92837	1	Zinco	Zinc anode
8	62511	1	Scambiatore acqua/aria	Water/air exchanger
9	10987	4	Attacco rapido NUT 955	Union
10	71237	130cm	Guarnizione adesiva KRONSTIK 12x10	Adhesive gasket
11	013205	1	Ponte supporto scambiatore	Exchanger support
12	80542	1	Regolatore caricabatteria 4126	Battery-charger regolator
13	013185	1	Statore 50Hz 115/230 IS 5.0	Stator 50Hz 230/115 IS 5.0
13	013683	1	Statore 60Hz 120/240 IS 6.0	Stator 60Hz 240/120 IS 6.0
14	32716	1	Interruttore termico 2P 20A 50/60 Hz	Thermal switch
15	71228	1	Cappuccio ETA 3120 2P	Thermal switch cover
16	012485	1	Staffa supporto termico	Thermal support bracket
17	013186	1	Griglia aspirazione alternatore	Alternator grid
18	013181	1	Coperchio lato cuscinetto	Bearing side cover
19	10844	4	Colonnetta nylon D.12,5x7	Spacer
20	30911	1	Ponte fisso FB10-10 PHOENIX	Bridge
21	32690	1	Scheda rele' con termico	Relay board with thermal switch
22	10566	1	Passacavo DG. 29	Grommet
23	31678	2	Rele' 12V 30A BOSCH	Relay
24	70876	1	Protezione scheda rele'	Relay board cover
25	30925	1	Portafusibile lamellare 100351	Fuse holder
26	30926	1	Piastra portafusibile100352	Fuse holder plate
27	30921	1	Fusibile 30A lamellare 600498	Fuse 30A
28	31973	1	Coperchio per portafusibile lamellare	Fuse holder cover
29	32040	1	Coperchio per condensatore D.40	Capacitor cover
30	70318	1	Fascetta plastica CU 50	Plastic clamp
31	31188	1	Condensatore CA 25 µF 450V 4F 50/60 Hz	Capacitor 20 µF
32	10614	2	Portagomma D.15 3/8"	Nipple
33	11383	1	Gomito a 90° F-F 3/8"	Elbow
34	10825	2	Fascetta D. 16/25 H9	Clamp
35	71168		Manicotto D.16/90° art3202	Sleeve
36	11395		Tirante centrale M8x175x5/16 C.72	Central rod
37	20521	2	Varistore	Varistor
38	910600	2	Diodo	Diode
39	11327	4	Tirante M8x145	Rod
40	70650	2	Antivibrante D50x45 55sh M10 "C"	Shock absorber
41	62522	1	Staffa supporto alternatore	Alternator support bracket



FIG.

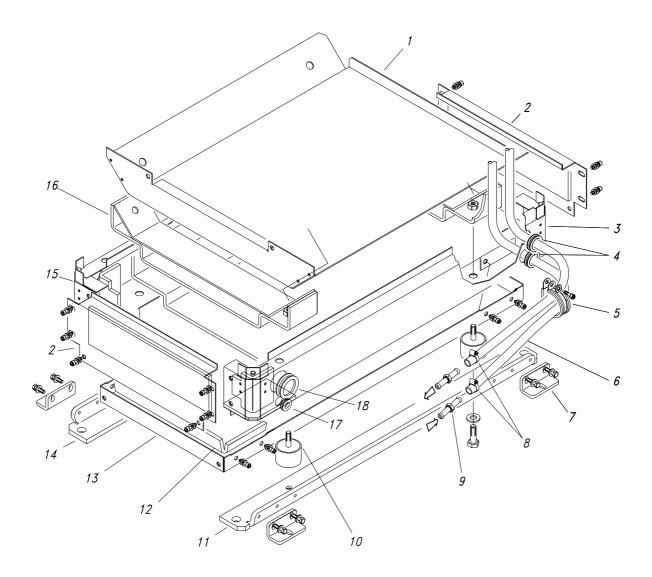


FIG.



basamento cassa botton frame

FIG. 3/4

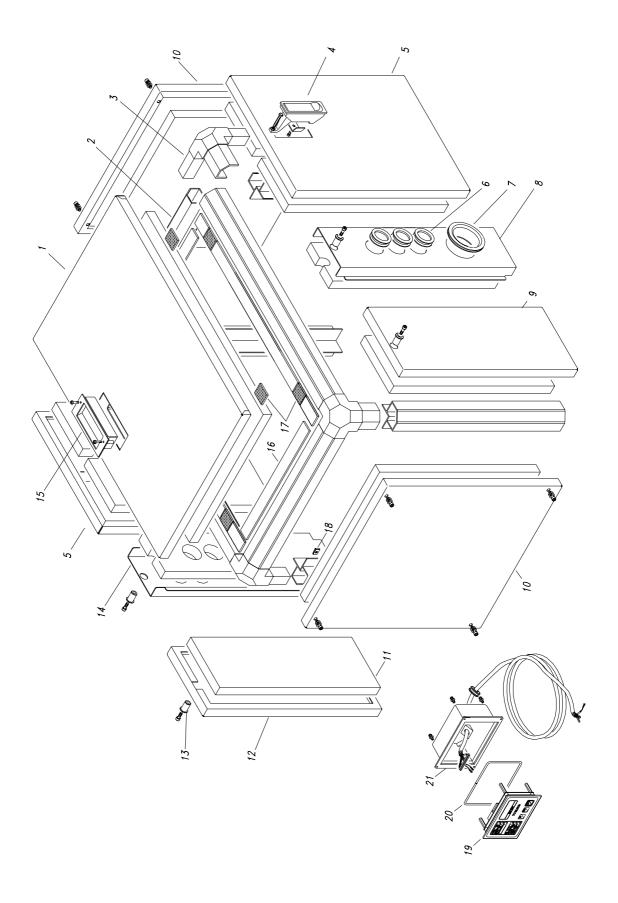


5 il.	CRG.	4 ty.	DesFriziRne	DesFriStiRn
1	013201	1	Convogliatore aria	Air manifold
2	013209	2	Pannello chiusura fondo (nudo)	Back panel (naked)
3	013540	1	Basamento dx (nudo)	Right base (naked)
4	70647	2	Passacavo DM.16 Interno	Grommet
5	11281		Fascetta D. 30 gommata	Rubber clamp
6	71169	50cm	Tubo carburante A1 D.8 ISO7840	Fuel pipe
7	62516		Staffa esterna fissaggio generatore	External fixing bracket
8	10791	2	Fascetta D. 8/16 H 9 IN	Clamp
9	11374	2	Portagomma nafta	Nipple
10	71235	4	Antivibrante D40x30 55sh M8 "C"	Shock absorber
11	62520	1	Staffa sx doppio antivibrante	Left double shock absorber bracket
12	71231	1	Kit insonorizzante fondo	Back soundproofing kit
13	013542	1	Basamento centrale (nudo)	Box bottom (naked)
14	62519	1	Staffa dx doppio antivibrante	Right double shock absorber bracket
15	013211	1	Basamento sx (nudo)	Left base (naked)
16	62521	2	Staffa supporto motore / alternatore	Engine / alternator support bracket
17	10566	2	Passacavo DG. 29	Grommet
18	70908	2	Passacavo D.120/200/40	Grommet



cassa frame

FIG. 4/4





cassa frame

FIG. 4/4

Rif.	Cod.	Qty.	Descrizione	Description
1	013195	1	Sportello superiore (nudo)	Upper door (naked)
2	013189	1	Kit profilati	Draw pieces kit
3	011067	4	Angolo 3 vie	Corner
4	62334	2	Chiusura regolabile	Adjusting closure
5	013193	2	Sportello lato motore (nudo)	Engine side door (naked)
6	10566	6	Passacavo DG 29	Core hitch
7	10567	1	Passacavo DG. 48	Core hitch
8	013199	1	Montante centrale dx (nudo)	Right panel (naked)
9	013197	1	Sportello dx lato alternatore (nudo)	Alternator side right door (naked)
10	013191	2	Pannello fisso motore / alternatore (nudo)	Front / rear panel (naked)
11	71230	1	Kit fonoassorbente	Soundproofing kit
12	013328	1	Sportello sx lato alternatore (nudo)	Alternator side left door (naked)
13	11333	4	Bussola	Collar
14	013207	1	Montante centrale sx (nudo)	Left panel (naked)
15	71078	1	Maniglia pocket pull	Handle
16	71139	100cm	Guarnizione adesiva 20x5	Adhesive gasket
17	71182	16cm	Chiusura a strappo	Tug closing
18	10823	12	Attacco rapido M6 nut 986	Union
19	91034	1	Pannello di controllo a distanza	Remote control panel
20	70786	40cm	Guarnizione D.3 AERSTOP	Gasket
21	012195	1	Scatola + guarnizione + 10mt di cavo cablato	Remote control panel box + gasket + 10 mt cable







